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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/799,506	02/12/97	YAMAZAKI	S 0756-1630

MMC2/0315
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2010 CORPORATE RIDGE SUITE 600
MCLEAN VA 22102

EXAMINER	
WILCZEWSKI, M	
ART UNIT	PAPER NUMBER
2822	

DATE MAILED: 03/15/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/799,506

Applicant(s)

Yamazaki et al.

Examiner

M. Wilczewski

Group Art Unit

2822



☒ Responsive to communication(s) filed on Dec 20, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 80-103 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 80-103 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☒ received in Application No. (Series Code/Serial Number) 08/330,797.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Continued Prosecution Application

The request filed on December 20, 1999, for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/799,506 is acceptable and a CPA has been established. An action on the CPA follows.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 08/330,797, filed on October 28, 1994.

Drawings

The drawings filed on October 28, 1994, have been objected to by the Draftsperson; note the form PTO-948 attached to Paper No. 4.

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Claims 80, 81, 83, 84, 86, 87, 89, and 90 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Zhang et al., U. S. Patent 5,352,291, newly cited.

Zhang et al. disclose an apparatus which anticipates the instant claims, see figure 2 and columns 6-7 (Example 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 92-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al., U. S. Patent 5,352,291, further in view of Begin et al., U. S. Patent 5,310,410.

Zhang et al. disclose a multi-chambered processing apparatus, as illustrated in Figure 2, in which a light irradiation chamber, heat treatment chamber and a deposition chamber are arranged

104-109
111-112

Robot arm
(88)-110
(89)-113

114, 115
116, 117
118, 119
120, 121, 122

add

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in series. The apparatus also includes a chamber for discharging substrates and a transportation system for transferring substrates from one chamber to another, see columns 6-7. Zhang et al. lack anticipation only of arranging the processing chambers in a cluster and having one chamber for putting the substrate into the multi-chambered apparatus and for taking the substrate out of the apparatus. Begin et al. discloses a multi-chambered apparatus in which loading chamber 26 is used to load substrates into the apparatus and transfer processed substrates out of the apparatus, see figures 1 and 2 and column 5, lines 9-16. It would have been obvious to the skilled artisan in light of the teachings of Begin et al. that the various processing chambers of the multi-chambered apparatus of Zhang et al. could be arranged in a cluster using one chamber for loading and unloading substrates into and out of the apparatus, since this is a well known arrangement for multi-chambered apparatuses and eliminates the need for two separate chambers for loading and unloading the substrates.

Claims 82, 85, 88, and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al., U. S. Patent 5,352,291.

Zhang et al. is applied as supra. Although Zhang et al. do not expressly teach use of the disclosed apparatus to form a silicon oxide film, Zhang et al. do disclose that the apparatus can be used to deposit an insulating film, see column 7, lines 10-18. It would have been obvious to the skilled artisan that the apparatus of Zhang et al. could have been used to form a silicon oxide film because a silicon oxide film is an insulating film.

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Claim Rejections - 35 USC § 112

Claims 82, 85, 88, 91, 94, 97, 100, 103 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The above-identified claims merely recite that the claimed apparatus is *capable of forming a silicon oxide film*. Hence, these claims fail to further limit the apparatus claims from which the above-identified claims depend.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additionally cited references disclose various types of multi-chambered apparatuses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Wilczewski whose telephone number is (703) 308-2771.



M. Wilczewski
Primary Examiner
Tech Center 2800